**PILOT CAR OPERATION FOR ALTERNATING 1-LANE, 2-WAY TRAFFIC: FLAGGER-CONTROLLED**

(45+ MPH HIGHWAYS)

**NOT TO SCALE**

---

**NOTES:**

1. AVOID PLACING LANE CLOSURE TAPERS WITHIN OR IMMEDIATELY FOLLOWING HORIZONTAL & Vertical CURVES BY ADJUSTING LONGITUDINAL BUFFER.

2. IF LONGITUDINAL BUFFER SPACE IS REDUCED FROM DISTANCES LISTED IN TABLE, UPGRADE PROTECTIVE VEHICLE TO A TRANSPORTABLE ATTENUATOR.

3. 28" TRAFFIC CONES RECOMMENDED. 36" TRAFFIC CONES, 42" TALL CHANNELIZATION DEVICES, OR TRAFFIC SAFETY DRUMS MAY ALSO BE USED. CHANNELIZATION DEVICES AT CENTERLINE ARE OPTIONAL.

4. ONLY WHEN MAINLINE FLAGGERS ARE LESS THAN 1000' +/- APART, BICYCLIST & PEDESTRIAN ACCOMMODATIONS:
   - (A) COMBINE BICYCLISTS WITH VEHICULAR TRAFFIC, BICYCLES RIDE DIRECTLY BEHIND PILOT CAR. 10 MPH
   - (B) ALLOW PEDESTRIANS TO USE THE PAVED SHOULDER OPPOSITE THE WORK AREA. SEE SHEET 1B
   - (C) ANOTHER STRATEGY ACCEPTED BY THE ENGINEER

5. FOR ALL SCENARIOS, BICYCLIST & PEDESTRIAN ACCOMMODATIONS:
   - (A) PROVIDE A BICYCLE & PEDESTRIAN SHUTTLE THROUGH LANE CLOSURE (PILOT CAR MAY BE USED)
   - (B) ALTERNATE BICYCLISTS & PEDESTRIANS USING A SEPARATE 2-WAY, 4+ FEET BIKE LANE (SEE SHEET 1B)
   - (C) ANOTHER STRATEGY ACCEPTED BY THE ENGINEER

6. PILOT CAR OPERATOR TO DRIVE SPEED PRUDENT FOR WORK ZONE CONDITIONS, STOPPING TRAFFIC IF NECESSARY. UP TO A MAXIMUM SPEED OF 35 MPH AT LANE SHIFTS 10 MPH EESCORTING BICYCLES.

7. SEE STANDARD SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS:
   - 1-07.011 HIGH VISIBILITY APPAREL
   - 1-08.31A FLAGGERS AND NIGHTTIME ILLUMINATION
   - 1-10.31A TRAFFIC CONTROL PROCEDURES
   - 1-10.36 24-INCH STOP/SLOW PADDLE SIZE

8. FOR PROJECT-SPECIFIC REQUIREMENTS SEE SPECIAL PROVISIONS.

9. SIGNS ARE BLACK ON ORANGE UNLESS OTHERWISE INDICATED.

10. ACTUAL CENTERLINE PAVEMENT MARKINGS MAY VARY.

---

**SECTION A-A**

**PILOT CAR OPERATION FOR ALTERNATING 1-LANE, 2-WAY TRAFFIC: FLAGGER-CONTROLLED**

(45+ MPH HIGHWAYS)

**NOT TO SCALE**

---

**NOTES:**

1. AVOID PLACING LANE CLOSURE TAPERS WITHIN OR IMMEDIATELY FOLLOWING HORIZONTAL & Vertical CURVES BY ADJUSTING LONGITUDINAL BUFFER.

2. IF LONGITUDINAL BUFFER SPACE IS REDUCED FROM DISTANCES LISTED IN TABLE, UPGRADE PROTECTIVE VEHICLE TO A TRANSPORTABLE ATTENUATOR.

3. 28” TRAFFIC CONES RECOMMENDED. 36” TRAFFIC CONES, 42” TALL CHANNELIZATION DEVICES, OR TRAFFIC SAFETY DRUMS MAY ALSO BE USED. CHANNELIZATION DEVICES AT CENTERLINE ARE OPTIONAL.

4. ONLY WHEN MAINLINE FLAGGERS ARE LESS THAN 1000’ +/- APART, BICYCLIST & PEDESTRIAN ACCOMMODATIONS:
   - (A) COMBINE BICYCLISTS WITH VEHICULAR TRAFFIC, BICYCLES RIDE DIRECTLY BEHIND PILOT CAR. 10 MPH
   - (B) ALLOW PEDESTRIANS TO USE THE PAVED SHOULDER OPPOSITE THE WORK AREA. SEE SHEET 1B
   - (C) ANOTHER STRATEGY ACCEPTED BY THE ENGINEER

5. FOR ALL SCENARIOS, BICYCLIST & PEDESTRIAN ACCOMMODATIONS:
   - (A) PROVIDE A BICYCLE & PEDESTRIAN SHUTTLE THROUGH LANE CLOSURE (PILOT CAR MAY BE USED)
   - (B) ALTERNATE BICYCLISTS & PEDESTRIANS USING A SEPARATE 2-WAY, 4+ FEET BIKE LANE (SEE SHEET 1B)
   - (C) ANOTHER STRATEGY ACCEPTED BY THE ENGINEER

6. PILOT CAR OPERATOR TO DRIVE SPEED PRUDENT FOR WORK ZONE CONDITIONS STOPPING TRAFFIC IF NECESSARY. UP TO A MAXIMUM SPEED OF 35 MPH AT LANE SHIFTS 10 MPH ESCORTING BICYCLES.

7. SEE STANDARD SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS:
   - 1-07.011 HIGH VISIBILITY APPAREL
   - 1-08.31A FLAGGERS AND NIGHTTIME ILLUMINATION
   - 1-10.31A TRAFFIC CONTROL PROCEDURES
   - 1-10.36 24-INCH STOP/SLOW PADDLE SIZE

8. FOR PROJECT-SPECIFIC REQUIREMENTS SEE SPECIAL PROVISIONS.

9. SIGNS ARE BLACK ON ORANGE UNLESS OTHERWISE INDICATED.

10. ACTUAL CENTERLINE PAVEMENT MARKINGS MAY VARY.
NOTES:
1. AVOID PLACING LANE CLOSURE TAPERS WITHIN OR IMMEDIATELY FOLLOWING HORIZONTAL & VERTICAL CURVES
2. IF CONDITIONAL BUFFER SPACE IS REDUCED FROM DISTANCES LISTED IN TABLE, UPGRADE PROTECTIVE VEHICLE TO A TRANSPORTABLE ATTENUATOR.
3. 28" TRAFFIC CONES RECOMMENDED. 36" TRAFFIC CONES, 42" TALL CHANNELIZATION DEVICES, OR TRAFFIC SAFETY DRUMS MAY ALSO BE USED. CHANNELIZATION DEVICES AT CENTERLINE ARE OPTIONAL.
4. ONLY WHEN MAINLINE FLAGGERS ARE LESS THAN 1000' +/- APART, BICYCLIST & PEDESTRIAN ACCOMMODATIONS: (A) COMBINE BICYCLISTS WITH VEHICULAR TRAFFIC. BICYCLISTS RIDE DIRECTLY BEHIND PILOT CAR @ 10 MPH (B) ALLOW PEDESTRIANS TO USE THE PAVEMENT SHOULDER OPPOSITE THE WORK AREA OR LANE CLOSURE.
5. FOR ALL SCENARIOS, BICYCLIST & PEDESTRIAN ACCOMMODATIONS.
6. PILOT CAR OPERATOR TO DRIVE SPEED PRUDENT FOR WORK ZONE CONDITIONS, STOPPING TRAFFIC IF NEEDED. USE ONE OF THE FOLLOWING RUMBLE STRIPS: * PSS Roadquake 2 or 2F Temporary Portable Rumble Strip (Black) (A): COMBINE BICYCLISTS WITH VEHICULAR TRAFFIC. BICYCLISTS RIDE DIRECTLY BEHIND PILOT CAR @ 10 MPH (B): ALTERNATE BICYCLISTS & PEDESTRIANS USING A SEPARATE 3-WAY, 4+ FEET BIKE LANE (SEE SHEET 2B) (C): ANOTHER STRATEGY ACCEPTED BY THE ENGINEER
7. SEE NOTES 1 & 2
8. FOR PROJECT-SPECIFIC REQUIREMENTS, SEE 9-35.1
9. AVOID PLACING TEMPORARY TRANVERSE RUMBLE STRIPS WITHIN HORIZONTAL CURVES. ADJUST SIGN SPACING IF NEEDED.
10. RETAIN USE OF THE FOLLOWING RUMBLE STRIPS:
    - PSS Roadquake 2 or 2F Temporary Portable Rumble Strip (Black)
    - Traffic Control Paddle (Black)
11. SIGNS ARE BLACK ON ORANGE UNLESS OTHERWISE INDICATED.
12. ACTUAL CENTERLINE PAVEMENT MARKINGS MAY VARY.

1. AVOID PLACING LANE CLOSURE TAPERS WITHIN OR IMMEDIATELY FOLLOWING HORIZONTAL & VERTICAL CURVES
2. IF CONDITIONAL BUFFER SPACE IS REDUCED FROM DISTANCES LISTED IN TABLE, UPGRADE PROTECTIVE VEHICLE TO A TRANSPORTABLE ATTENUATOR.
3. 28" TRAFFIC CONES RECOMMENDED. 36" TRAFFIC CONES, 42" TALL CHANNELIZATION DEVICES, OR TRAFFIC SAFETY DRUMS MAY ALSO BE USED. CHANNELIZATION DEVICES AT CENTERLINE ARE OPTIONAL.
4. ONLY WHEN MAINLINE FLAGGERS ARE LESS THAN 1000' +/- APART, BICYCLIST & PEDESTRIAN ACCOMMODATIONS: (A) COMBINE BICYCLISTS WITH VEHICULAR TRAFFIC. BICYCLISTS RIDE DIRECTLY BEHIND PILOT CAR @ 10 MPH (B) ALLOW PEDESTRIANS TO USE THE PAVEMENT SHOULDER OPPOSITE THE WORK AREA OR LANE CLOSURE.
5. FOR ALL SCENARIOS, BICYCLIST & PEDESTRIAN ACCOMMODATIONS.
6. PILOT CAR OPERATOR TO DRIVE SPEED PRUDENT FOR WORK ZONE CONDITIONS, STOPPING TRAFFIC IF NEEDED. USE ONE OF THE FOLLOWING RUMBLE STRIPS: * PSS Roadquake 2 or 2F Temporary Portable Rumble Strip (Black) (A): COMBINE BICYCLISTS WITH VEHICULAR TRAFFIC. BICYCLISTS RIDE DIRECTLY BEHIND PILOT CAR @ 10 MPH (B): ALTERNATE BICYCLISTS & PEDESTRIANS USING A SEPARATE 3-WAY, 4+ FEET BIKE LANE (SEE SHEET 2B) (C): ANOTHER STRATEGY ACCEPTED BY THE ENGINEER
7. SEE NOTES 1 & 2
8. FOR PROJECT-SPECIFIC REQUIREMENTS, SEE 9-35.1
9. AVOID PLACING TEMPORARY TRANVERSE RUMBLE STRIPS WITHIN HORIZONTAL CURVES. ADJUST SIGN SPACING IF NEEDED.
10. RETAIN USE OF THE FOLLOWING RUMBLE STRIPS:
    - PSS Roadquake 2 or 2F Temporary Portable Rumble Strip (Black)
    - Traffic Control Paddle (Black)
11. SIGNS ARE BLACK ON ORANGE UNLESS OTHERWISE INDICATED.
12. ACTUAL CENTERLINE PAVEMENT MARKINGS MAY VARY.
NOTES:

14. For legend, tables, and additional notes see TC323, Sheet 1.

15. Work may occur across intersecting roadway approach (on same side as lane closure) by holding access traffic up to 5 minutes and restricting turns from mainline channelization devices delineating approach may be removed.

16. Single flagger may be added to the intersecting roadway approach to help guide alternating traffic & bicyclists through intersection.

17. Work may occur across driveway or access by adding a flagger and holding access traffic up to 5 minutes and restricting turns into access from mainline channelization devices delineating access may be removed.

18. Pavement markings may vary.

**SIGN SEQUENCE A**

48"x48" signs required on 45+ mph roadways

---

**UN SIGNALIZED INTERSECTING ROADWAY DETAIL**

SAME SIDE AS LANE CLOSURE (TWO OPEN LANES)

---

**DRIVEWAY OR BUSINESS ACCESS DETAIL**

SAME SIDE AS LANE CLOSURE

---

**UN SIGNALIZED INTERSECTING ROADWAY DETAIL**

OPPOSITE OF LANE CLOSURE

---

**PILOT CAR OPERATION FOR ALTERNATING 1-LANE 2-WAY TRAFFIC: FLAGGER-CONTROLLED**

(45+ MPH HIGHWAYS)

---

**NOTE:**

On low-volume intersecting roadways (less than 400 AADT, such as forest roads or tribal roads in rural areas), X-225-101 (24"x18" BW) may be used at stopbar in lieu of flagger and sign sequence A.

---

**NOTE:**

S-20-1 required on 45+ mph roadways.

---

**NOTE:**

Stopbar in lieu of flagger and sign sequence A.

---

**NOTE:**

G25-101 (24"x18", B/W) may be used at low-volume intersecting roadways (less than 400 AADT, such as forest roads or tribal roads in rural areas), and on low-volume intersecting roadways (less than 400 AADT, such as forest roads or tribal roads in rural areas), and on low-volume intersecting roadways (less than 400 AADT, such as forest roads or tribal roads in rural areas), and on low-volume intersecting roadways (less than 400 AADT, such as forest roads or tribal roads in rural areas), and on low-volume intersecting roadways (less than 400 AADT, such as forest roads or tribal roads in rural areas), and on low-volume intersecting roadways (less than 400 AADT, such as forest roads or tribal roads in rural areas), and on low-volume intersecting roadways (less than 400 AADT, such as forest roads or tribal roads in rural areas), and on low-volume intersecting roadways (less than 400 AADT, such as forest roads or tribal roads in rural areas).
NOTES:
14 FOR LEGEND, TABLES, AND ADDITIONAL NOTES SEE TC123, SHEET 1.
15 WORK MAY OCCUR ACROSS INTERSECTING ROADWAY APPROACH (ON SAME SIDE AS LANE CLOSURE) BY HOLDING ACCESS TRAFFIC UP TO 5 MINUTES AND RESTRICTING TURNS FROM MAINLINE CHANNELIZATION DEVICES DELINEATING APPROACH MAY BE REMOVED.
16 SINGLE FLAGGER MAY BE ADDED TO THE INTERSECTING ROADWAY APPROACH TO HELP GUIDE ALTERNATING TRAFFIC & BICYCLISTS THROUGH INTERSECTION.
17 WORK MAY OCCUR ACROSS DRIVEWAY OR ACCESS BY ADDING A FLAGGER AND HOLDING ACCESS TRAFFIC UP TO 5 MINUTES AND RESTRICTING TURNS INTO ACCESS FROM MAINLINE CHANNELIZATION DEVICES DELINEATING ACCESS MAY BE REMOVED.
18 PAVEMENT MARKINGS MAY VARY.

SIGN SEQUENCE A
48"x48" signs required on 45+ mph roadways

USE SIGN SEQUENCE A
ALWAYS REQUIRED FOR THIS CONFIGURATION

NOTE:
ON LOW-VOLUME INTERSECTING ROADSeways (LESS THAN 400 AADT, SUCH AS FOREST ROADS OR TRIBAL ROADS IN RURAL AREAS), W25-101 (24"X18", BW) MAY BE USED AT STOPBAR IN LIEU OF FLAGGER AND SIGN SEQUENCE A.

UNSIGNALIZED INTERSECTING ROADWAY DETAIL
SAME SIDE AS LANE CLOSURE (TWO OPEN LANES)

10 SPACEING ACROSS INTERSECTION
10 MIN TRAFFIC LANE

NOT TO SCALE

Pilot Car Operation for Alternating 1-Lane 2-Way Traffic: Flagger-Controlled High-Velocity Bicycle & Pedestrian Strategies (45+ MPH HIGHWAYS)

Washington State Department of Transportation
TYPICAL TRAFFIC CONTROL PLANS
### TYPICAL TRAFFIC CONTROL PLANS

**Pilot Car Operation for Alternating 1-Lane, 2-Way Traffic: Flagger-Controlled**

(45+ MPH Highways) **NOT TO SCALE**

**NOTES:**

1. Avoid placing lane closure tapers within or immediately following horizontal & vertical curves by adjusting longitudinal buffer.

2. If longitudinal buffer space is reduced from distances listed in Table, upgrade protective vehicle to a transportable attenuator.

3. Traffic cones recommended: 36" tall channelization devices, or traffic safety drums may also be used. Channelization devices at centerline are optional.

4. Only when mainline flaggers are less than 1000' apart, bicyclist & pedestrian accommodations:
   - (A): combine bicyclists with vehicular traffic. Bicyclists ride directly behind pilot car @ 10 MPH
   - (B): allow pedestrians to use the paved shoulder opposite the work area thru lane closure, up to a maximum speed of 35 MPH (25 MPH at lane shift, 10 MPH escorting bicyclists).
   - (C): another strategy accepted by the engineer

5. For all scenarios, bicyclist & pedestrian accommodations:
   - (A): provide a bicycle & pedestrian shuttle through lane closure (pilot car may be used)
   - (B): alternate bicyclists & pedestrians using a separate 4'x4' FEET BIKE LANE (See Sheet 1B)
   - (C): another strategy accepted by the engineer

6. Pilot car operator to drive speed prudent for work zone conditions stopping traffic if necessary. Up to a maximum speed of 35 MPH at lane shift, 25 MPH escorting bicycles.

7. See standard specifications for additional requirements:
   - 1-07.8(1) high-visibility apparel
   - 1-09.3(A1) traffic control procedures
   - 1-10.3(1)A traffic control device
   - 24-inch stop/slow paddle

8. For project-specific requirements, see special provisions.

9. Signs are black on orange unless otherwise indicated.

10. Actual center line pavement markings may vary.

---

**LEGEND:**

- **K**: Temporary sign location
- **28" REFLECTIVE TRAFFIC CONE (SEE NOTE 3)**
- **LABELS**: Optional channelization device
- **X**: Motor vehicle
- **W20-1**: Pilot car
- **W21-1201**: Work area

---

**TABLE: Sign Spacing**

<table>
<thead>
<tr>
<th>Length (feet)</th>
<th>Speed (MPH)</th>
</tr>
</thead>
<tbody>
<tr>
<td>50-65</td>
<td>40-45</td>
</tr>
<tr>
<td>60-75</td>
<td>40-45</td>
</tr>
<tr>
<td>75-90</td>
<td>40-45</td>
</tr>
<tr>
<td>90-100</td>
<td>40-45</td>
</tr>
<tr>
<td>100+</td>
<td>40-45</td>
</tr>
</tbody>
</table>

---

**Figure:**

- Pilot Car Operation for Alternating 1-Lane, 2-Way Traffic: Flagger-Controlled (45+ MPH Highways) Not to Scale
PILOT CAR OPERATION FOR ALTERNATING 1-LANE, 2-WAY TRAFFIC: FLAGGER-CONTROLLED HIGH-VOLUME BICYCLE & PEDESTRIAN STRATEGIES (45+ MPH HIGHWAYS)

NOT TO SCALE

Washington State
Department of Transportation

TYPICAL TRAFFIC CONTROL PLANS

TC323

DATE: 7/15/2022

PROJ. ENGR. S. HAAPALA

PLOTTED BY LINTZ

DESIGNED BY DAKALA & LINTZ

ENTERED BY LINTZ

CHECKED BY S. HAAPALA

PREPARED

REGIONAL ADM.

REVISION

DATE
NOTES:

14. FOR LEGEND, TABLES, AND ADDITIONAL NOTES SEE TC323, SHEET 1.

15. WORK MAY OCCUR ACROSS INTERSECTING ROADWAY Approach (ON SAME SIDE AS LANE CLOSURE) BY HOLDING ACCESS TRAFFIC UP TO 5 MINUTES AND Restricting turns from Mainline. Channelization devices delineating approach may be removed.

16. A SINGLE FLAGGER MAY BE ADDED TO THE INTERSECTING ROADWAY Approach TO HELP GUIDE ALTERNATING Traffic & Bicyclists Through INTERSECTION.

17. WORK MAY OCCUR ACROSS DRIVEWAY OR ACCESS BY ADDING A FLAGGER AND Holding ACCESS TRAFFIC UP TO 5 MINUTES AND Restricting turns into Access FROM MAINLINE. Channelization devices delineating access may be removed.

18. PAVEMENT MARKINGS MAY VARY.

**SIGN SEQUENCE A**

40"x48" signs required on 45+ mph roadways

**UNSIGNALIZED INTERSECTING ROADWAY DETAIL**

SAME SIDE AS LANE CLOSURE (TWO OPEN LANES)

**UNSIGNALIZED INTERSECTING ROADWAY DETAIL**

SAME SIDE AS LANE CLOSURE (TWO OPEN LANES)

**UNSIGNALIZED INTERSECTING ROADWAY DETAIL**

OPPOSITE OF LANE CLOSURE (SINGLE OPEN LANE)

PILOT CAR OPERATION FOR ALTERNATING 1-LANE, 2-WAY TRAFFIC: FLAGGER-CONTROLLED

NOT TO SCALE

Washington State Department of Transportation

TYPICAL TRAFFIC CONTROL PLANS
14. For legend, tables, and additional notes see TC323, SHEET 1.

15. Work may occur across intersecting roadway approach (on same side as lane closure) by holding access traffic up to 5 minutes and restricting turns from mainline channelization devices delineating approach may be removed.

16. Single flagger may be added to the intersecting roadway approach to help guide alternating traffic & bicyclists through intersection.

17. Work may occur across driveway or access by adding a flagger and holding access traffic up to 5 minutes and restricting turns into access from mainline channelization devices delineating access may be removed.

18. Pavement markings may vary.

**NOTES**

**SIGN SEQUENCE A**

48" x 48" signs required on 45+ mph roadways.

**USE SIGN SEQUENCE A**

**NOTE:**

On low-volume intersecting roadways (less than 400 ADT, such as forest roads or tribal roads in rural areas), X 025-101 (24"x18", B/W) may be used at stop bar in lieu of flagger and sign sequence A.

**UNIVERSAL INTERSECTING ROADWAY DETAIL**

**SAME SIDE AS LANE CLOSURE (TWO OPEN LANES)**

**UNIVERSAL INTERSECTING ROADWAY DETAIL**

**SAME SIDE AS LANE CLOSURE (SINGLE OPEN LANE)**

**PILOT CAR OPERATION FOR ALTERNATING 1-LANE 2-WAY TRAFFIC: FLAGGER-CONTROLLED HIGH-VOLUME BICYCLE & PEDESTRIAN STRATEGIES (45+ MPH HIGHWAYS)**

**NOT TO SCALE**

**POSSIBLE THROUGH TRAFFIC ALTERNATIVE**

**SAME SIDE AS LANE CLOSURE**

**SAME SIDE AS LANE CLOSURE**

**DRIVEWAY OR BUSINESS ACCESS DETAIL**

**DRIVEWAY OR BUSINESS ACCESS DETAIL**

**UNIVERSAL INTERSECTING ROADWAY DETAIL**

**OPPOSITE OF LANE CLOSURE**

**TYPICAL TRAFFIC CONTROL PLANS**

**FILE NAME:** C:\Users\LintzF\OneDrive - Washington State Department of Transportation\Desktop\Work Zone TC323\36914\36914Al\TC323hwy45+AltTraffic\FlaggerControlled.dgn

**TIME:** 12:38:11 PM

**DATE:** 7/15/2022

**FILE:** TC323

**PLOT:** 1B

**DESIGNED BY:** B. Haapala & Lintz

**CHECKED BY:** S. Haapala

**REVISION:** 71

**NOTES:**

14. For legend, tables, and additional notes see TC323, SHEET 1.

15. Work may occur across intersecting roadway approach (on same side as lane closure) by holding access traffic up to 5 minutes and restricting turns from mainline channelization devices delineating approach may be removed.

16. Single flagger may be added to the intersecting roadway approach to help guide alternating traffic & bicyclists through intersection.

17. Work may occur across driveway or access by adding a flagger and holding access traffic up to 5 minutes and restricting turns into access from mainline channelization devices delineating access may be removed.

18. Pavement markings may vary.

**NOTES**

**SIGN SEQUENCE A**

48" x 48" signs required on 45+ mph roadways.

**USE SIGN SEQUENCE A**

**NOTE:**

On low-volume intersecting roadways (less than 400 ADT, such as forest roads or tribal roads in rural areas), X 025-101 (24"x18", B/W) may be used at stop bar in lieu of flagger and sign sequence A.

**UNIVERSAL INTERSECTING ROADWAY DETAIL**

**SAME SIDE AS LANE CLOSURE (TWO OPEN LANES)**

**UNIVERSAL INTERSECTING ROADWAY DETAIL**

**SAME SIDE AS LANE CLOSURE (SINGLE OPEN LANE)**

**PILOT CAR OPERATION FOR ALTERNATING 1-LANE 2-WAY TRAFFIC: FLAGGER-CONTROLLED HIGH-VOLUME BICYCLE & PEDESTRIAN STRATEGIES (45+ MPH HIGHWAYS)**

**NOT TO SCALE**

**POSSIBLE THROUGH TRAFFIC ALTERNATIVE**

**SAME SIDE AS LANE CLOSURE**

**SAME SIDE AS LANE CLOSURE**

**DRIVEWAY OR BUSINESS ACCESS DETAIL**

**DRIVEWAY OR BUSINESS ACCESS DETAIL**

**UNIVERSAL INTERSECTING ROADWAY DETAIL**

**OPPOSITE OF LANE CLOSURE**

**TYPICAL TRAFFIC CONTROL PLANS**

**FILE NAME:** C:\Users\LintzF\OneDrive - Washington State Department of Transportation\Desktop\Work Zone TC323\36914\36914Al\TC323hwy45+AltTraffic\FlaggerControlled.dgn

**TIME:** 12:38:11 PM

**DATE:** 7/15/2022

**FILE:** TC323

**PLOT:** 1B

**DESIGNED BY:** B. Haapala & Lintz

**CHECKED BY:** S. Haapala

**REVISION:** 71

**NOTES:**

14. For legend, tables, and additional notes see TC323, SHEET 1.

15. Work may occur across intersecting roadway approach (on same side as lane closure) by holding access traffic up to 5 minutes and restricting turns from mainline channelization devices delineating approach may be removed.

16. Single flagger may be added to the intersecting roadway approach to help guide alternating traffic & bicyclists through intersection.

17. Work may occur across driveway or access by adding a flagger and holding access traffic up to 5 minutes and restricting turns into access from mainline channelization devices delineating access may be removed.

18. Pavement markings may vary.

**NOTES**

**SIGN SEQUENCE A**

48" x 48" signs required on 45+ mph roadways.

**USE SIGN SEQUENCE A**

**NOTE:**

On low-volume intersecting roadways (less than 400 ADT, such as forest roads or tribal roads in rural areas), X 025-101 (24"x18", B/W) may be used at stop bar in lieu of flagger and sign sequence A.

**UNIVERSAL INTERSECTING ROADWAY DETAIL**

**SAME SIDE AS LANE CLOSURE (TWO OPEN LANES)**

**UNIVERSAL INTERSECTING ROADWAY DETAIL**

**SAME SIDE AS LANE CLOSURE (SINGLE OPEN LANE)**

**PILOT CAR OPERATION FOR ALTERNATING 1-LANE 2-WAY TRAFFIC: FLAGGER-CONTROLLED HIGH-VOLUME BICYCLE & PEDESTRIAN STRATEGIES (45+ MPH HIGHWAYS)**

**NOT TO SCALE**

**POSSIBLE THROUGH TRAFFIC ALTERNATIVE**

**SAME SIDE AS LANE CLOSURE**

**SAME SIDE AS LANE CLOSURE**

**DRIVEWAY OR BUSINESS ACCESS DETAIL**

**DRIVEWAY OR BUSINESS ACCESS DETAIL**

**UNIVERSAL INTERSECTING ROADWAY DETAIL**

**OPPOSITE OF LANE CLOSURE**

**TYPICAL TRAFFIC CONTROL PLANS**

**FILE NAME:** C:\Users\LintzF\OneDrive - Washington State Department of Transportation\Desktop\Work Zone TC323\36914\36914Al\TC323hwy45+AltTraffic\FlaggerControlled.dgn

**TIME:** 12:38:11 PM

**DATE:** 7/15/2022

**FILE:** TC323

**PLOT:** 1B

**DESIGNED BY:** B. Haapala & Lintz

**CHECKED BY:** S. Haapala

**REVISION:** 71

**NOTES:**

14. For legend, tables, and additional notes see TC323, SHEET 1.

15. Work may occur across intersecting roadway approach (on same side as lane closure) by holding access traffic up to 5 minutes and restricting turns from mainline channelization devices delineating approach may be removed.

16. Single flagger may be added to the intersecting roadway approach to help guide alternating traffic & bicyclists through intersection.

17. Work may occur across driveway or access by adding a flagger and holding access traffic up to 5 minutes and restricting turns into access from mainline channelization devices delineating access may be removed.

18. Pavement markings may vary.

**NOTES**

**SIGN SEQUENCE A**

48" x 48" signs required on 45+ mph roadways.

**USE SIGN SEQUENCE A**

**NOTE:**

On low-volume intersecting roadways (less than 400 ADT, such as forest roads or tribal roads in rural areas), X 025-101 (24"x18", B/W) may be used at stop bar in lieu of flagger and sign sequence A.

**UNIVERSAL INTERSECTING ROADWAY DETAIL**

**SAME SIDE AS LANE CLOSURE (TWO OPEN LANES)**

**UNIVERSAL INTERSECTING ROADWAY DETAIL**

**SAME SIDE AS LANE CLOSURE (SINGLE OPEN LANE)**

**PILOT CAR OPERATION FOR ALTERNATING 1-LANE 2-WAY TRAFFIC: FLAGGER-CONTROLLED HIGH-VOLUME BICYCLE & PEDESTRIAN STRATEGIES (45+ MPH HIGHWAYS)**

**NOT TO SCALE**

**POSSIBLE THROUGH TRAFFIC ALTERNATIVE**

**SAME SIDE AS LANE CLOSURE**

**SAME SIDE AS LANE CLOSURE**

**DRIVEWAY OR BUSINESS ACCESS DETAIL**

**DRIVEWAY OR BUSINESS ACCESS DETAIL**

**UNIVERSAL INTERSECTING ROADWAY DETAIL**

**OPPOSITE OF LANE CLOSURE**

**TYPICAL TRAFFIC CONTROL PLANS**

**FILE NAME:** C:\Users\LintzF\OneDrive - Washington State Department of Transportation\Desktop\Work Zone TC323\36914\36914Al\TC323hwy45+AltTraffic\FlaggerControlled.dgn

**TIME:** 12:38:11 PM

**DATE:** 7/15/2022

**FILE:** TC323

**PLOT:** 1B

**DESIGNED BY:** B. Haapala & Lintz

**CHECKED BY:** S. Haapala

**REVISION:** 71

**NOTES:**

14. For legend, tables, and additional notes see TC323, SHEET 1.

15. Work may occur across intersecting roadway approach (on same side as lane closure) by holding access traffic up to 5 minutes and restricting turns from mainline channelization devices delineating approach may be removed.

16. Single flagger may be added to the intersecting roadway approach to help guide alternating traffic & bicyclists through intersection.

17. Work may occur across driveway or access by adding a flagger and holding access traffic up to 5 minutes and restricting turns into access from mainline channelization devices delineating access may be removed.

18. Pavement markings may vary.
# Plot Usage Explanation:

- **Plot 1:** Plot Car Operation for flagger-controlled 1-lane, 2-way alternating traffic on 45+ mph 2-lane highways unshifted within the existing open lane with bike-vehicle shared lane, pedestrian shoulder usage, or shuttle strategies.
- **Plot 2:** Plot Car operation for flagger-controlled 1-lane, 2-way alternating traffic on 45+ mph 2-lane highways within the existing open lane @ 10’ MIN for high-volume bicycle and pedestrian scenarios.
- **Plot 3:** Plot Car operation for flagger-controlled 1-lane, 2-way alternating traffic with temporary portable transverse rumble strips on 45+ mph 2-lane highways unshifted within the existing open lane. bike-vehicle shared lane, pedestrian shoulder usage, or shuttle strategies.
- **Plot 4:** Plot Car operation for flagger-controlled 1-lane, 2-way alternating traffic with temporary portable transverse rumble strips on 45+ mph 2-lane highways within the existing open lane @ 20’ MIN for high-volume bicycle and pedestrian scenarios.
- **Plot 5:** Plot Car operation for flagger-controlled 1-lane, 2-way alternating traffic with temporary portable transverse rumble strips on 45+ mph 2-lane highways unshifted within the existing open lane with bike-vehicle shared lane, pedestrian shoulder usage, or shuttle strategies.
- **Plot 6:** Plot Car operation for flagger-controlled 1-lane, 2-way alternating traffic on 45+ mph 2-lane highways within the existing open lane @ 10’ MIN for high-volume bicycle and pedestrian scenarios.

# Typical TCP Usage Explanation:

### Other Alternating Traffic TCPs (45+ mph)

* TC605s for standard traffic control plans without work areas.
* TC625s for flagger-controlled alternating traffic.
* TC640s for temporary signal controlled alternating traffic plans.
* TC695s for traffic cones.
* TC705s for temporary signal controlled alternating traffic plans.
* TC720s for traffic cones.
* TC735s for temporary signal controlled alternating traffic plans.
* TC790s for traffic cones.
* TC805s for temporary signal controlled alternating traffic plans.
* TC890s for traffic cones.
* TC905s for temporary signal controlled alternating traffic plans.

## PILOT CAR OPERATION FOR ALTERNATING 1-LANE, 2-WAY TRAFFIC: FLAGGER-CONTROLLED INCLUDING TEMP. RUMBLE STRIPS (45+ MPH HIGHWAYS)

<table>
<thead>
<tr>
<th>FILE NAME</th>
<th>2022/03/31 05:03PM</th>
<th>Washington State Department of Transportation</th>
<th>98/12/20 8:30AM</th>
<th>FLAPD PROJECT NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>TC123</td>
<td>05/03/22 12:42PM</td>
<td>10</td>
<td>321</td>
<td>6601001</td>
</tr>
<tr>
<td>DESIGNED BY</td>
<td>(98)</td>
<td>WASH</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHECKED BY</td>
<td>90</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENTERED BY</td>
<td>90</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>REGIONAL ADM.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DESIGNER NOTES</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Contact Region Traffic Operations to determine which Typical TCP(s) to utilize, as their are several variations available (or soon will be).
- These typical traffic control plans may be modified for site specific conditions and/or WSDOT Region Traffic Operations standard practices.
- Typical TCPs are not "Standard Plans".
- See MUTCD Table 6-1 for additional temporary traffic zone sign information. Work zone signs are usually smaller than those used permanently.
- WAC 468-95-306 modifies MUTCD Table 6-1 "Recommended Advance Warning Sign Minimum Spacing". Sign spacing may be adjusted for field conditions based on engineering judgement. The minimum spacing table is acceptable to use in Typical TCP; however, site-specific traffic control plans should include actual sign spacing values (with +/-) that have been verified in the field, on SR view, or via Google Maps.
- When positioned behind channelization devices, temporary signs should be mounted at 5’ minimum.
- Work zone design speed is typically the posted speed limit (or the work zone speed limit when in effect). For split speed limits (SPEED LIMIT 65 TRUCKS 60), use the higher 65 mph for work zone design. For this Typical TCP, the work zone design speed is based on the existing posted speed limit for sign spacing, channelization device spacing, buffer, and roll ahead distances.
- "Flagger tapers" are always 52’-100’ per closed lane with 6 devices minimum (10’-20’ spacing on the taper), regardless of the posted speed limit or lane width per MUTCD 6C.08, Paragraph 15. Never use "L" for these tapers.
- Channelization devices types may be modified (vertical panel channelization devices prohibited). 26’ reflective traffic cones are recommended on flagger-controlled alternating traffic for access designation and visibility (for turning motorists). 36’ reflective traffic cones, 42” tall channelization devices, or traffic safety drums may be used. Warning lights on channelization devices is being phased out in Washington, Contact Region Traffic Operations for information regarding their standard practices.
- Maximum channelization device spacing table for tapers is based on WAC 468-95-301 and may ALWAYS be reduced.”

<table>
<thead>
<tr>
<th>STATE</th>
<th>FED.AID PROJ.NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>WASH</td>
<td>6601001</td>
</tr>
</tbody>
</table>